

7. Luis

Program Name: Luis.java

Input File: luis.dat

Luis is the registrar at Wakanda High School. He must prepare two reports for the counselor. The first must show a semester average for each student in Wakanda High. The second report should show the class average for each course this semester. There are 10 courses and an unknown number of students. Not every student takes every course and not every student takes the same number of courses. For a course that was not taken by a student the grade will be shown as NA. Every course has at least one student enrolled, and every student takes at least one course.

Input: An unknown number of lines each consisting of a student's first and last name followed by 10 grades or an indication that the student did not take a course (NA). All data will be separated by a comma. Each column following the names represents a course. They are in this order: Algebra, Calculus, Computer Science, Economics, English, Geometry, Government, Spanish, U.S. History, and World History.

Output: Two reports. The first should consist of one line for each student consisting of the students first and last name followed by their semester average each separated by one space. This list should be in alphabetical order by last then first name. Separate the reports with a single line of exactly 20 asterisks. The second report should consist of one line for each course in the order listed above followed by one space and then the course average for this semester.

All values in both reports should be rounded to 3 decimal places.

Sample Data:

```
Liam,Smith,NA,79,81,NA,75,59,90,NA,100,56
Noah,Johnson,68,NA,53,75,66,92,73,51,95,NA
William,Williams,71,77,69,NA,54,NA,NA,92,84,90
James,Jones,77,NA,96,98,61,78,57,98,77,89
Logan,Brown,79,80,52,82,73,NA,NA,NA,NA,91
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Sample Output:

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Logan Brown 76.167
Noah Johnson 71.625
James Jones 81.222
Liam Smith 77.143
William Williams 76.714
*****
Algebra 73.750
Calculus 78.667
Computer Science 70.200
Economics 85.000
English 65.800
Geometry 76.333
Government 73.333
Spanish 80.333
U.S. History 89.000
World History 81.500
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